

REMARKS

This is responsive to the Office Action issued on July 16, 2003. By this response, claims 1, 4-6, 13, 16, 26 and 27 are amended. No new matter is added. Claims 17-22 were previously cancelled. Claims 1-16 and 23-29 are now active for examination.

The Office Action rejected claims 1, 2, 4, 5, 13-15, 16 and 26 under 35 U.S.C. §102(b) as being anticipated by Salley et al (U.S. Patent No. 5,254,952); claim 6, 11, 12, 27 and 28 under 35 U.S.C. §103(a) as being unpatentable over Salley; claims 3 and 7-10 under 35 U.S.C. §103(a) as being unpatentable over Salley in view of Tanaka (U.S. Patent No. 4,895,308); and claims 23-25 under 35 U.S.C. §103(a) as being unpatentable over Salley in view of Bertness (U.S. Patent No. 6,331,762). Claim 29 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

The Examiner is thanked for the courtesy to grant an interview on August 29, 2003 to discuss the differences between the claims and the references of record. Specifically, the meaning of the term "a first predetermined period of time" as recited in the claims were discussed. It was understood that the first predetermined period of time is set to ensure better signal qualities. The Examiner suggested that the claims be amended to clarify that the first predetermined period of time does not equal to a period of time caused by signal delays.

The rejections and objection are respectfully traversed in view of the amendment and remarks presented herein.

THE ANTICIPATION REJECTION IS TRAVERSED

Claims 1, 2, 4, 5, 13-15, 16 and 26 were rejected under 35 U.S.C. §102(b) as being anticipated by Salley. The rejection is respectfully traversed because Salley cannot support a prima facie case of anticipation.

Claim 1, as amended, recites:

A method for evaluating the operation of an alternator driven by a motor, comprising the steps of:
detecting a motor speed or an alternator speed;
coupling a load to the alternator upon the motor speed or the alternator speed reaching a predetermined level; and
detecting characteristics of an alternator output signal representative of an alternator characteristic after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is chosen such that the detected alternator output signal is stable.

Thus, a method according to claim 1 detects characteristics of the alternator output after the load has been coupled to the alternator for a first predetermined period of time so that the detected alternator output signal is stabilized. Appropriate support for the amendment can be found in, for example, Fig. 3; page 2, lines, 19-27; page 6, lines 25-31; and page 8, lines 3-18. Independent claims 4, 13, 16 and 26, as amended, also include descriptions related to determining the health of the alternator based on alternator output signal received after a load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is chosen such that the detected alternator output signal is stable.

As suggested by the Examiner, the claims are amended to clarify that the first predetermined period of time is different from a period caused by signal delay. The first determined period of time is chosen such that the detected alternator output signal is stable. Thus, the method or method according to the claims not only waits for the alternator signals to

arrive (which may be delayed due to signal delay), but also waits until the arrived signals are stable. It is understood that the first determined period of time is different from a period caused by signal delay because at the point after the period of signal delay, the detected alternator output signal is still unstable.

Salley fails to teach the features described in claims 1, 4, 13, 16 and 26. Salley is related to a semi-automatic alternator/battery tester. A user connects the tester to an alternator that is driven by an automobile engine. When the engine speeds reaches a predetermined level, the user pushes a start button on the tester to apply a load to the alternator. Even if the tester described in Salley starts to analyze signals after a period caused by signal delay, the alternator output signals detected by the Salley's tester are not stable. Thus, Salley does not describe detecting characteristics of an alternator output signal representative of an alternator characteristic after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined of time is chosen such that the detected alternator output signal is stable, as described by claims 1, 4, 13, 16 and 26.

Since Salley fails to teach every limitation of claim 1, 4, 13, 16 and 26, Salley cannot support a prima facie case of anticipation. The anticipation rejection is thus untenable and should be withdrawn. Claims 2, 5, 14, and 15 depend on claims 1, 4 and 13, respectively, and include every limitation thereof. Therefore, the anticipation rejection of claims 2, 5, 14, and 15 is also untenable and should be withdrawn based on the same reasons discussed relative to claims 1, 4 and 13, as well as on their own merits. Favorable reconsideration of claims 1, 2, 4, 5, 13-15, 16 and 26 is respectfully requested.

THE OBVIOUSNESS REJECTIONS ARE TRAVERSED

Claim 6, 11, 12, 27 and 28 were rejected as being unpatentable over Salley. The obviousness rejection is respectfully traversed because Salley cannot support a prima facie case of obviousness.

Claim 6 recites "the controller determines characteristics of the alternator output signal based on parameters collected after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is chosen such that the alternator output signal received by the system is stable." Independent claim 27 also includes comparable descriptions.

As discussed relative to claim 1, Salley does not teach determining characteristics of the alternator output signal based on parameters collected after the load has been coupled to the alternator for a first predetermined period of time wherein the first predetermined of time is chosen such that the alternator output signal received by the system is stable, as described by claims 6 and 27. Since Salley fails to teach every limitation of claims 6 and 27, Salley cannot support a prima facie case of obviousness. Claims 6 and 27 are patentable over Salley. Favorable reconsideration of claims 6 and 27 is respectfully requested.

Claims 11, 12 and 28 depend on claims 6 and 27, respectively, and incorporate every limitation thereof. Therefore, claims 11, 12 and 28 are also patentable over Salley based on the same reasons discussed relative to claims 6 and 27, as well as on their own merits. Favorable reconsideration of claims 11, 12 and 28 is respectfully requested.

Claims 3 and 7-10 were rejected as being unpatentable over Salley in view of Tanaka. The obviousness rejection is respectfully traversed because Salley and Tanaka, even combined, cannot support a prima facie case of obviousness.

Claims 3 and 7-10, directly or indirectly, depend on claims 1 and 6, respectively, and include every limitation thereof. As discussed earlier relative to claims 1 and 6, Salley does not teach determining characteristics of the alternator output signal based on parameters collected after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined of time is chosen such that the detected alternator output signal is stable, as described in claims 1 and 6. Tanaka, the other reference cited in the Office Action, does not alleviate this deficiency.

Tanaka was cited by the Examiner for disclosing a Nichrome coil and a fan for use as a load and heat dissipation means, respectively. Similar to Salley, Tanaka also fails to teach determining characteristics of the alternator output signal based on parameters collected after the load has been coupled to the alternator for a first predetermined period where in the first predetermined of time is chosen such that the detected alternator output signal is stable, as described in claims 1 and 6. Therefore, Salley and Tanaka, even combined, do not teach every limitation of claims 1 and 6. Thus, claims 1 and 6 are patentable over Salley and Tanaka. Claims 3 and 7-10 depend on claims 1 and 6, respectively. Accordingly, claims 3 and 7-10 are also patentable over Salley and Tanaka based on the same reasons discussed relative to claims 1 and 6, as well as on their own merits. Favorable reconsideration of claims 3 and 7-10 is respectfully requested.

The Office Action rejected claims 23-25 as being unpatentable over Salley in view of Bertness (U.S. Patent No. 6,331,762). Claims 23-25 depend on claim 13, directly or indirectly, and include every limitation thereof. As discussed earlier relative to claim 13, Salley does not teach detecting characteristics of an alternator output signal representative of an alternator characteristic after the load has been coupled to the alternator for a first predetermined period of time greater than zero and greater than a period of time caused by signal delay, as required by claim 13.

Bertness, too, fails to teach this feature. Bertness was cited by the Examiner for teaching different signal transmission means used in signal communications, and does not teach detecting characteristics of an alternator output signal representative of an alternator characteristic after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period time is chosen such that the alternator output signal received by the system is stable, as described in claim 13. Therefore, Salley and Bertness, even combined, fail to teach every limitation of claim 13. Claim 13 is thus patentable over Salley and Bertness. Since claims 23-25 include every limitation of claim 13, claims 23-25 are also patentable over Salley and Bertness based on the same reasons discussed relative to claim 13 as well as on their own merits. Favorable reconsideration of claims 23-25 is respectfully requested.

THE OBJECTION OF CLAIM 29 IS ADDRESSED

Claim 29 was objected to as being dependent upon a rejected base claim (claim 13), but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims. As discussed earlier, claim 13 is patentable over the references of record. Therefore, claim 29 is also patentable over the reference of record based on the same reasons discussed relative to claim 13 as well as on its own merit. Favorable reconsideration of claim 29 is respectfully requested.

CONCLUSION

Therefore, the present application claims subject matter patentable over the references of record and is in condition for allowance. Favorable consideration is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including

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extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

A handwritten signature in cursive script that reads "Wei-Chen Chen".

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Recognition under 37 CFR §10.9(b)

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